SEQUENCE LISTING

(1) GENERAL INFORMATION

(i) APPLICANT: Hillman, Jennifer L. Goli, Surya K.

- (ii) TITLE $b_{ extsf{F}}$ THE INVENTION: NOVEL CALCIUM-BINDING PROTEIN
- (iii) NUMBER OF SEQUENCES: 4
- (iv) CORRESPONDENCE ADDRESS:
 - (A) ADDRESSEE: Incyte Pharmaceuticals, Inc.
 (B) STREET: 31 4 Porter Drive
 (C) CITY: Palo Alto

 - (D) STATE: CA
 - (E) COUNTRY: USA
 - (F) ZIP: 94304
- (v) COMPUTER READABLE FORM:
 - (A) MEDIUM TYPE: Diskette
 - (B) COMPUTER: IBM Compatible
 - (C) OPERATING SYSTEM: DOS
 - (D) SOFTWARE: Fast SEQ for Windows Version 2.0
- (vi) CURRENT APPLICATION DATA:
 - (A) APPLICATION NUMBER: To Be Assigned
 - (B) FILING DATE: Filed Herewith
 - (C) CLASSIFICATION:
- (vii) PRIOR APPLICATION DATA:
 - (A) APPLICATION NUMBER:
 - (B) FILING DATE:
- (viii) ATTORNEY/AGENT INFORMATION:
 - (A) NAME: Billings, Lucy J.
 - (B) REGISTRATION NUMBER ₹ 36,749
 - (C) REFERENCE/DOCKET NUMBER: PF-0261 US
- (ix) TELECOMMUNICATION INFORMATION:
 - (A) TELEPHONE: 415-855-05\$5
 - (B) TELEFAX: 415-845-4166
 - (2) INFORMATION FOR SEQ IN NO:1:
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 328 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (vii) IMMEDIATE SOURCE:
 - (A) LIBRARY: CONUTUT01
 - (B) CLONE: 2509570
- (xi) SEQUENCE DESCRIPTION: SEQ ID NO: 1:

Met Met Trp Arg Pro Ser Val Leu Leu Leu Leu Leu Leu Leu Arg His 10 Gly Ala Gln Gly Lys Pro Ser Pro Asp Ala Gly Pho His Gly Gln Gly 25 Arg Val His Gln Ala Ala Pro Leu Ser Asp Ala Pr $oldsymbol{d}$ His Asp Asp Ala 40 His Gly Asn Phe Gln Tyr Asp His Glu Ala Phe Leu\Gly Arg Glu Val 60 50

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Ala Lya Glu Phe Asp Gln Leu Thr Pro Glu Glu Ser Gln Ala Arg Leu 70 75 Gly Arg \Ile Val Asp Arg Met Asp Arg Ala Gly Asp Gly Asp Gly Trp 90 85 Val Ser Deu Ala Glu Leu Arg Ala Trp Ile Ala His Thr Gln Gln Arg 105 His Ile Art Asp Ser Val Ser Ala Ala Trp Asp Thr Tyr Asp Thr Asp 125 120 115 Arg Asp Gly\Arg Val Gly Trp Glu Glu Leu Arg Asn Ala Thr Tyr Gly 135 140 His Tyr Ala Aro Gly Glu Glu Phe His Asp Val Glu Asp Ala Glu Thr 155 150 Tyr Lys Lys Met Leu Ala Arg Asp Glu Arg Arg Phe Arg Val Ala Asp 165 170 175 Gln Asp Gly Asp\Ser Met Ala Thr Arg Glu Glu Leu Thr Ala Phe Leu 185 180 His Pro Glu Glu Phe Pro His Met Arg Asp Ile Val Ile Ala Glu Thr 200 195 Leu Glu Asp Leu Ask Arg Asn Lys Asp Gly Tyr Val Gln Val Glu Glu 215 220 Tyr Ile Ala Asp Leu Tyr Ser Ala Glu Pro Gly Glu Glu Pro Ala 235 Trp Val Gln Thr Glu Atg Gln Gln Phe Arg Asp Phe Arg Asp Leu Asn 250 245 Lys Asp Gly His Leu Ash Gly Ser Glu Val Gly His Trp Val Leu Pro 270 265 260 Pro Ala Gln Asp Gln Pro Leu Val Glu Ala Asn His Leu Leu His Glu 285 280 275 Ser Asp Thr Asp Lys Asp Gly Arg Leu Ser Lys Ala Glu Ile Leu Gly 295 300 Asn Trp Asn Met Phe Val Gly Ser Gln Ala Thr Asn Tyr Gly Glu Asp 315 310 Leu Thr Arg His His Asp Glu Leu

(2) INFORMATION FOR SEQ ID NO:2:

- (i) SEQUENCE CHARACTERIST (CS:
 - (A) LENGTH: 1055 base patrs
 - (B) TYPE: nucleic acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (vii) IMMEDIATE SOURCE:

325

- (A) LIBRARY: CONTUT01
- (B) CLONE: 2509570

(xi) SEQUENCE DESCRIPTION: SEQ 1 NO:2:

			\			
GGAGAGCGGA	NGNANTGGNA	TAACAGGGGA	CCGATGATGT	GGCGACCATC	AGTTCTGCTG	60
CTTCTGTTGC	TACTGAGGCA	CGGGGCCCAG	GGGAAGCCAT	CCCCAGACGC	AGGCCCTCAT	120
GGCCAGGGGA	GGGTGCACCA	GGCGGCCCCC	CTGAGCGACG	CTCCCCATGA	TGACGCCCAC	180
GGGAACTTCC	AGTACGACCA	TGAGGCTTTC	CTGGGACGG	AAGTGGCCAA	GGAATTCGAC	240
CAACTCACCC	CAGAGGAAAG	CCAGGCCCGT	CTGGGGCGGA	TCGTGGACCG	CATGGACCGC	300
GCGGGGGACG	GCGACGGCTG	GGTGTCGCTG	GCCGAGCTTC	GCGCGTGGAT	CGCGCACACG	360
CAGCAGCGGC	ACATACGGGA	CTCGGTGAGC	GCGGCCTGGG	ACACGTACGA	CACGGACCGC	420
GACGGGCGTG	TGGGTTGGGA	GGAGCTGCGC	AACGCCACCT	ATGGCCACTA	CGCGCCCGGT	480
GAAGAATTTC	ATGACGTGGA	GGATGCAGAG	ACCTACAAAA	AGATGCTGGC	TCGGGACGAG	540
CGGCGTTTCC	GGGTGGCCGA	CCAGGATGGG	GACTCGATGG	CCACTCGAGA	GGAGCTGACA	600
GCCTTCCTGC	ACCCCGAGGA	GTTCCCTCAC	ATGCGGGACA	TCGTGATTGC	TGAAACCCTG	660
GAGGACCTGG	ACAGAAACAA	AGATGGCTAT	GTCCAGGTGG	AGGAGTACAT	CGCGGATCTG	720
TACTCAGCCG	AGCCTGGGGA	GGAGGAGCCG	GCGTGGGTGC	AGAC GGAGAG	GCAGCAGTTC	780
CGGGACTTCC	GGGATCTGAA	CAAGGATGGG	CACCTGGATG	GGAGTGAGGT	GGGCCACTGG	840
GTGCTGCCCC	CTGCCCAGGA	CCAGCCCCTG	GTGGAAGCCA	ACCACCTGCT	GCACGAGAGC	900
GACACGGACA	AGGATGGGCG	GCTGAGCAAA	GCGGAAATCC	TGGGTAATTG	GAACATGTTT	960
GTGGGCAGTC	AGGCCACCAA	CTATGGCGAG	GACCTGACCC	GGCACCACGA	TGAGCTGTGA	1020

GCACCGCCACA CCTGCCACAG CCTCAGAGGC CCGCA

(2) INFORMATION FOR SEQ ID NO:3:

- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 331 amino acids
 - (B) TYPE: amino acid
 - (C) TRANDEDNESS: single
 - (D) TOPOLOGY: linear
- (vii) IMMEDIATE SOURCE:
 - (A) LABRARY: GenBank
 - (B) CLONE: 1262329

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:3:

Met Ala Arg Gly Gty Arg Gly Arg Arg Leu Gly Leu Ala Leu Gly Leu 1.0 Leu Leu Ala Leu Val Leu Ala Pro Arg Val Leu Arg Ala Lys Pro Thr 3.0 2.5 20 Val Arg Lys Glu Arg Val Val Arg Pro Asp Ser Glu Leu Gly Glu Arg 45 40 Pro Pro Glu Asp Asn Oln Ser Phe Gln Tyr Asp His Glu Ala Phe Leu 60 55 Gly Lys Glu Asp Ser Ly Thr Phe Asp Gln Leu Thr Pro Asp Glu Ser 75 Lys Glu Arg Leu Gly Lys\Ile Val Asp Arg Ile Asp Asn Asp Gly Asp 90 85 Gly Phe Val Thr Thr Glu $\dot{\mathbf{q}}$ lu Leu Lys Thr Trp Ile Lys Arg Val Gln 110 105 Lys Arg Tyr Ile Phe Asp Ash Val Ala Lys Val Trp Lys Asp Tyr Asp $\begin{array}{c} 115 \\ \text{Arg Asp Lys Asp Asp Lys Ile} \end{array} \begin{array}{c} 120 \\ \text{Ser Trp Glu Glu Tyr Lys Gln Ala Thr} \end{array}$ 140 135 130 Tyr Gly Tyr Tyr Leu Gly Asn Pro Ala Glu Phe His Asp Ser Ser Asp 155 150 His His Thr Phe Lys Lys Met Leu Pro Arg Asp Glu Arg Arg Phe Lys 165 170 Ala Ala Asp Leu Asn Gly Asp Leu Thr Ala Thr Arg Glu Glu Phe Thr 185 190 180 Ala Phe Leu His Pro Glu Glu Phe 당 lu His Met Lys Glu Ile Val Val 205 200 195 Leu Glu Thr Leu Glu Asp Ile Asp Ligs Asn Gly Asp Gly Phe Val Asp 220 215 Gln Asp Glu Tyr Ile Ala Asp Met Phe Ser His Glu Glu Asn Gly Pro 230 235 225 Glu Pro Asp Trp Val Leu Ser Glu Arg Glu Gln Phe Asn Glu Phe Arg **3**,50 245 Asp Leu Asn Lys Asp Gly Lys Leu Asp L $\!\!\!\sqrt{}$ s Asp Glu Ile Arg His Trp 270 265 260 Ile Leu Pro Gln Asp Tyr Asp His Ala Gl\ Ala Glu Ala Arg His Leu 285 275 280 Val Tyr Glu Ser Asp Lys Asn Lys Asp Glu $\sqrt{
m L}$ Lys Leu Thr Lys Glu Glu 300 295 290 Ile Leu Glu Asn Trp Asn Met Phe Val Gly Ser Gln Ala Thr Asn Tyr 310 Gly Glu Asp Leu Thr Lys Asn His Asp Glu Leu 330

- (2) INFORMATION FOR SEQ ID NO:4:
- (i) SEQUENCE CHARACTERISTICS:
 - (A) LENGTH: 325 amino acids
 - (B) TYPE: amino acid
 - (C) STRANDEDNESS: single
 - (D) TOPOLOGY: linear

- (Vii) IMMEDIATE SOURCE:
 - (A) LIBRARY: GenBank
 - (B) CLONE: 220582

(xi) SEQUENCE DESCRIPTION: SEQ ID NO:4:

Met Ala Arg Gly Gly Arg Leu Gly Leu Ala Leu Gly Leu Leu Ala Leu Val Leu Ala Leu Arg Ala Lys Pro Thr Val Arg Lys Glu Arg Val 20 25 Val Arg Pro Asa Ser Glu Leu Gly Glu Arg Pro Pro Glu Asp Asn Gln 40 35 Ser Phe Gln Tyr Asp His Glu Ala Phe Leu Gly Lys Glu Asp Ser Lys 55 60 Thr Phe Asp Gln Lau Ser Pro Asp Glu Ser Lys Glu Arg Leu Gly Lys 70 Ile Val Asp Arg Ile Asp Ser Asp Gly Asp Gly Leu Val Thr Thr Glu 90 85 Glu Leu Lys Leu Trp tle Lys Arg Val Gln Lys Arg Tyr Ile Tyr Asp 110 100 105 Asn Val Ala Lys Val Tro Lys Asp Tyr Asp Arg Asp Lys Asp Glu Lys 120 125 Ile Ser Trp Glu Glu Tyr Lys Gln Ala Thr Tyr Gly Tyr Tyr Leu Gly 140 135 Asn Pro Ala Glu Phe His Asp Ser Ser Asp His His Thr Phe Lys Lys 155 150 Met Leu Pro Arg Asp Glu Arg Arg Phe Lys Ala Ser Asp Leu Asp Gly 170 175 165 Asp Leu Thr Ala Thr Arg Glu clu Phe Thr Ala Phe Leu His Pro Glu 190 180 185 Glu Phe Glu His Met Lys Glu Ile Val Val Leu Glu Thr Leu Glu Asp 200 205 195 Ile Asp Lys Asn Gly Asp Gly Phe Val Asp Gln Asp Glu Tyr Ile Ala 220 215 Asp Met Phe Ser His Glu Asp Asn Gly Pro Glu Pro Asp Trp Val Leu 235 230 Ser Glu Arg Glu Gln Phe Asn Asp Phe Arg Asp Leu Asn Lys Asp Gly 250 245 Lys Leu Asp Lys Asp Glu Ile Arg His Trp Ile Leu Pro Gln Asp Tyr 260 265 270 Asp His Ala Gln Ala Glu Ala Arg His Le λ Val Tyr Glu Ser Asp Lys 285 280 Asn Lys Asp Glu Met Leu Thr Lys Glu Glu 🕇 le Leu Asp Asn Trp Asn 295 290 Met Phe Val Gly Ser Gln Ala Thr Asn Tyr Gl χ Glu Asp Leu Thr Lys 315 Asn His Asp Glu Leu 325